

Title (en)
SEMICONDUCTOR STRUCTURE, AND FABRICATION METHOD AND CONTROL METHOD THEREFOR

Title (de)
HALBLEITERSTRUKTUR, HERSTELLUNGSVERFAHREN UND STEUERVERFAHREN DAFÜR

Title (fr)
STRUCTURE SEMI-CONDUCTRICE, ET SON PROCÉDÉ DE FABRICATION ET SON PROCÉDÉ DE COMMANDE

Publication
EP 3985672 A4 20220608 (EN)

Application
EP 21773442 A 20210602

Priority
• CN 202010921763 A 20200904
• CN 2021097909 W 20210602

Abstract (en)
[origin: US2022077158A1] A semiconductor structure includes: a base substrate; an insulator, located on one side of the base substrate; bit lines, arranged in the insulator, the bit lines being distributed at intervals along first direction and extending along second direction; active bodies, located in the insulator, the active bodies being located on sides of respective bit lines facing away from the base substrate, orthographic projection of each active body on the base substrate at least partially coinciding with the orthographic projection of a respective bit line on the base substrate, and the active bodies being distributed at intervals along second direction; and word lines, located in the insulator and located on sides of respective bit lines facing away from the base substrate, the word lines being distributed at intervals along second direction and extending along first direction, and only one word line being arranged between two adjacent active bodies in second direction.

IPC 8 full level
H10B 12/00 (2023.01); **H01L 29/66** (2006.01); **H01L 29/78** (2006.01); **H10B 69/00** (2023.01)

CPC (source: EP US)
G11C 11/4085 (2013.01 - US); **H01L 29/66666** (2013.01 - EP US); **H01L 29/7827** (2013.01 - EP US); **H10B 12/05** (2023.02 - EP US); **H10B 12/315** (2023.02 - EP US); **H10B 12/482** (2023.02 - EP); **H10B 12/488** (2023.02 - EP US); **H10B 12/0335** (2023.02 - EP)

Citation (search report)
• [XAYI] US 2002109176 A1 20020815 - FORBES LEONARD [US], et al
• [IJ] US 2018069117 A1 20180308 - CHO WOoyeong [KR], et al
• [IY] US 2013056812 A1 20130307 - KIM SUA [KR], et al
• [Y] US 2013161710 A1 20130627 - JI YUN-HYUCK [KR], et al
• See also references of WO 2022048217A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
US 11871554 B2 20240109; US 2022077158 A1 20220310; EP 3985672 A1 20220420; EP 3985672 A4 20220608; EP 3985672 B1 20240124

DOCDB simple family (application)
US 202117391195 A 20210802; EP 21773442 A 20210602